

WHAT IS CLAIMED IS:

1. A microchip controller board comprising:
 - a programmable microchip controller;
 - terminals for writing a program into said microchip controller;
 - a circuit pattern having terminals for operating said microchip controller which are connected to shared terminals; and
 - an operating circuit pattern for operating said microchip controller which is disconnected in a portion where a program writing is not obstructed.
2. The microchip controller board according to claim 1, wherein a gap of the disconnected portion of said operating circuit pattern is narrower than a width of said operating circuit pattern and an interval of said circuit pattern.
3. The microchip controller board according to claim 1 or 2, wherein the gap of the disconnected portion of said operating circuit pattern is 0.2 mm or less.
4. The microchip controller board according to any one of claims 1 to 3, wherein
 - a shape of the disconnected portion of said operating circuit pattern is formed into circularity.
5. A manufacturing method for a microchip controller board including a programmable microchip controller, terminals for writing a program into said microchip controller, and a circuit pattern having terminals for operating said microchip controller which are connected to shared terminals, and an operating circuit pattern for operating said microchip controller that is disconnected in a portion where a program writing is not obstructed, comprising the steps of:
 - mounting said non-programmed microchip controller on said board in a state in which said operating circuit pattern for operating said microchip controller is disconnected;
 - programming said microchip controller with a programming tool from

the programming terminals of said microchip controller;
removing thereafter said programming tool; and
connecting the portion where said operating circuit pattern for
operating said microchip controller is disconnected, thereby manufacturing
said microchip controller board.

6. A manufacturing method for a microchip controller board including a
program-rewritable microchip controller, terminals for writing a program into
said microchip controller, and a circuit pattern having terminals for
operating said microchip controller which are connected to shared terminals,
and an operating circuit pattern for operating said microchip controller that
is disconnected in a portion where the program writing is not obstructed,
comprising the steps of:

writing a program into said microchip controller,
connecting thereafter the portion where said operating circuit pattern
is disconnected;
disconnecting once again said connected portion of said circuit pattern
of the microchip controller board;
changing the program of said microchip controller by a programming
tool from the programming terminal of said microchip controller;
removing thereafter said programming tool;
connecting the portion where said operating circuit pattern for
operating said microchip controller is disconnected, thereby manufacturing
said microchip controller board.